

Appl. No.: 10/775,635
Reply to Office Action of: February 11, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listing, of claims in the present application:

Listing of Claims:

1. (cancelled)
2. (currently amended) A plug connector comprising:
a first plug contact;
a second plug contact;
a conductive connecting member formed as a spring, positioned between the first
and second plug contacts and forming an electrical contact between an inner surface of the first
plug contact and an outer surface of the second plug contact; and,
a receiving element substantially surrounding and housing the conductive
connecting member between the first and second plug contacts. The plug connector according to
claim 1 wherein the connecting member is a flat spiral spring in certain sections.
3. (original) The plug connector according to claim 2 wherein the connecting member further comprises flat spiral spring regions and straight regions located one after the other.
4. (currently amended) A plug connector comprising:
a first plug contact;
a second plug contact;
a conductive connecting member formed as a spring, positioned between the first
and second plug contacts and forming an electrical contact between an inner surface of the first
plug contact and an outer surface of the second plug contact; and,

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a receiving element substantially surrounding and housing the conductive connecting member between the first and second plug contacts. ~~The plug connector according to claim 1~~ wherein the connecting member is a flat spiral spring.

5. (currently amended) A plug connector comprising:

a first plug contact;

a second plug contact;

a conductive connecting member formed as a spring, positioned between the first and second plug contacts and forming an electrical contact between an inner surface of the first plug contact and an outer surface of the second plug contact; and,

a receiving element substantially surrounding and housing the conductive connecting member between the first and second plug contacts. ~~The plug connector according to claim 1, wherein the receiving element further comprises~~ and comprising a helical groove into which the connecting member can be inserted.

6. (original) The plug connector according to claim 5 wherein the connecting member is arranged to be biased within the helical groove.

7. (original) The plug connector according to claim 6 wherein a helical axis of the connecting member runs approximately transverse to a connecting direction of the plug contacts.

8. (currently amended) A plug connector comprising:

a first plug contact;

a second plug contact;

a conductive connecting member formed as a spring, positioned between the first and second plug contacts and forming an electrical contact between an inner surface of the first plug contact and an outer surface of the second plug contact; and,

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a receiving element substantially surrounding and housing the conductive connecting member between the first and second plug contacts. The plug connector according to claim 1 wherein the connecting member is approximately annular and the receiving element comprises at least one transverse groove into which the connecting member is inserted.

9. (original) The plug connector according to claim 3 wherein the connecting member is fastened to the receiving element at the straight regions.

10. (original) The plug connector according to claim 9 wherein the receiving element is a plastic injection moulded part to which the connecting member is fastened.

11. (original) The plug connector according to claim 2 wherein the receiving element further comprises a latching element having a latching projection which is engagable with a recess located in one of the first and second plug contacts.

12. (previously presented) An electrical connector arrangement comprising:
a male plug contact having a substantially cylindrical conductive outer surface;
a female plug contact having a substantially cylindrical conductive inner surface;
a conductive connecting member formed as a spring; and,
a receiving element housing said conductive connecting member wherein the male plug contact biases the connecting member outwardly and the female plug contact biases the connecting member inwardly to form an electrical connection between the male plug contact and the female plug contact.

13. (original) The electrical connector arrangement according to claim 12 wherein the conductive connecting member is a flat spiral spring in certain sections.

14. (original) The electrical connector arrangement according to claim 13 wherein the conductive connecting member further comprises flat spiral spring regions and straight regions located one after the other.

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15. (original) The electrical connector arrangement according to claim 12 wherein the conductive connecting member is a flat spiral spring.
16. (original) The electrical connector arrangement according to claim 12 wherein the receiving element further comprises a helical groove into which the connecting member can be inserted.
17. (original) The electrical connector arrangement according to claim 16 wherein the conductive connecting member is arranged to be biased within the helical groove.
18. (original) The electrical connector arrangement according to claim 17 wherein a helical axis of the conductive connecting member runs approximately transverse to a connecting direction of the plug contacts.
19. (original) The electrical connector arrangement according to claim 12 wherein the conductive connecting member is approximately annular and the receiving element comprises at least one transverse groove into which the conductive connecting member is inserted.
20. (original) The electrical connector arrangement according to claim 15 wherein the conductive connecting member is fastened to the receiving element at the straight regions.
21. (original) The electrical connector arrangement according to claim 20 wherein the receiving element is a plastic injection moulded part to which the conductive connecting member is fastened.
22. (original) The electrical connector arrangement according to claim 13 wherein the receiving element further comprises a latching element having a latching projection which is engagable with a recess located in one of the first and second plug contacts.